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ROOT-KNOT NEMATODES INFECTING THE LEAVES AND INFLORESCENCES OF PALISOTA BARTERI

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Many different genera and species of nematodes inflict severe injury to the aboveground parts of plants. They can infect stems, leaves, buds, flowers, or seeds. Symptoms of aboveground nematode infection which can appear on any part of the plant are tissue discoloration, distortion, necrotic patches or lesions, galls, and apical tissue destruction.

Root-knot nematodes (Meloidogyne spp.) normally infect roots of plants below ground. Although they are occasionally found on stems and leaves, naturally occurring leaf infections are quite rare.

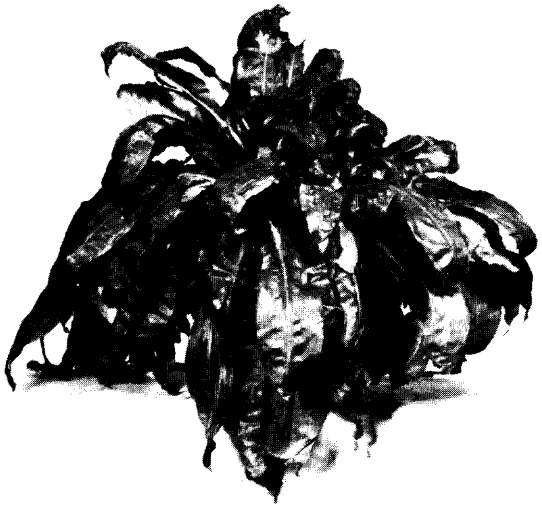

Fig. 1. Palisota barteri with leaf infection of root-knot nematode.

Figure 1 shows a plant of Palisota barteri Hooker f., the leaves (figs. 2,3) and inconspicuous inflorescences of which are infected with the root-knot nematode Meloidogyne javanica (Treub, 1885) Chitwood, 1949. The symptoms are chiefly expressed as large and disfiguring galls on petioles and leaves. Galls appear on both dorsal and ventral surfaces in a variety of shapes as pits, mounds, cones, and cylindrical spires. Many leaves are distorted. The infected flower bracts and bracteoles have small lightly swollen galls enclosing mature female nematodes with egg masses.

Fig. 2. Infected leaf, dorsal side.

Fig. 3. Infected leaf, ventral side.

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